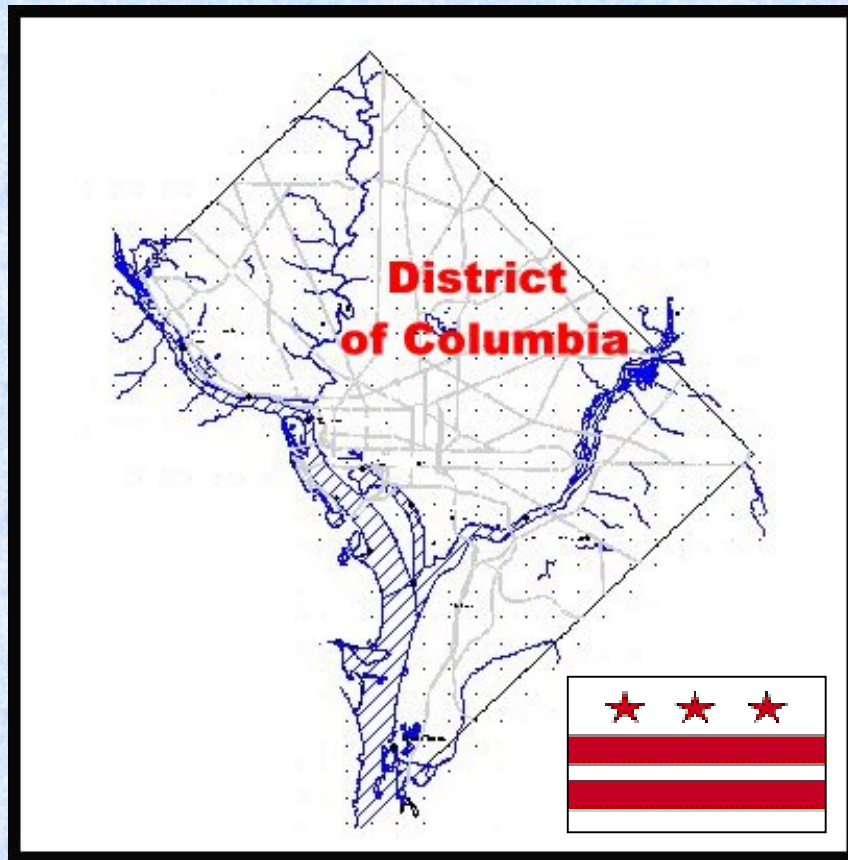


Fisheries Introduction



District of Columbia
Fisheries and Wildlife Division

District of Columbia



Department of Health



Environmental Health
Administration



Bureau of Environmental
Quality

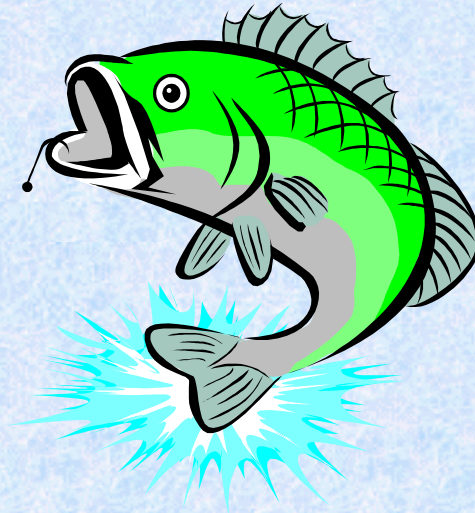


Fisheries and Wildlife
Division

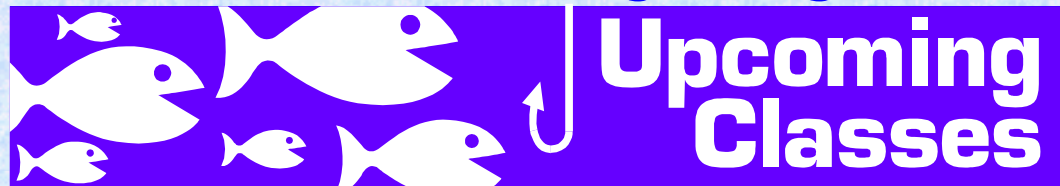
Fish and Wildlife Division

What does DCFW do?

- Research
- Licensure
- Regulation
- Management
- Education



Summer Fishing Program



What is Biology?

What is Biology?

The study of living things.

Composed of cells.

Growth.

Metabolism.

Homeostasis.

Movement.

Response to stimulus.

Reproduction.



Aquatic Environments

What is aquatic Biology?

The study of life in water environments.

What animals live in aquatic habitats?



What type of plants live in aquatic habitats?



Plant Biology

What are terrestrial plants?

Plants that live on land.

What are aquatic plants?

Plants that live on land.



What are functions of aquatic Plants?

- Oxygen
- Habitat
- Food

Fish Biology

What is a fish?



Characteristics of fish:

Body Temperature: Cold-blooded or ectothermic

Vertebrates: A bony backbone like amphibians, reptiles, birds and mammals.

Respiration: Gills extract oxygen from the water.

Habitat: Aquatic environments.

Locomotion: Fins and undulating body motions.

Fish and their Environment

What are factors affect where fish live in their environment?

Fish live in their comfort zone. The comfort zone is where a fish finds the right water temperature, oxygen, light and current. Additionally other factors that affect where a fish resides include:

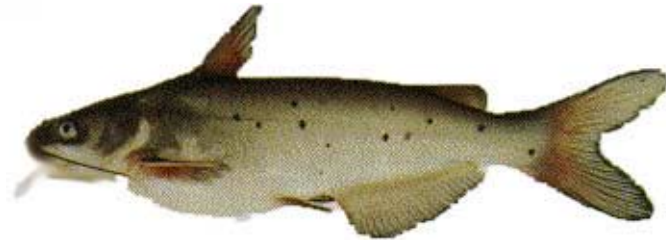
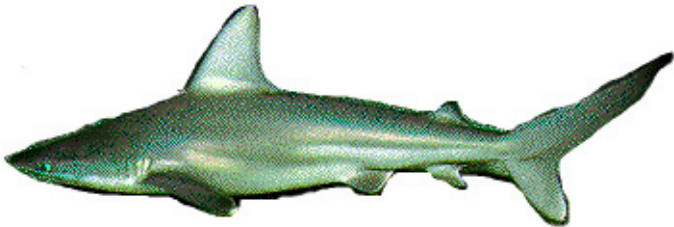
- Food
- Protection
- Reproduction



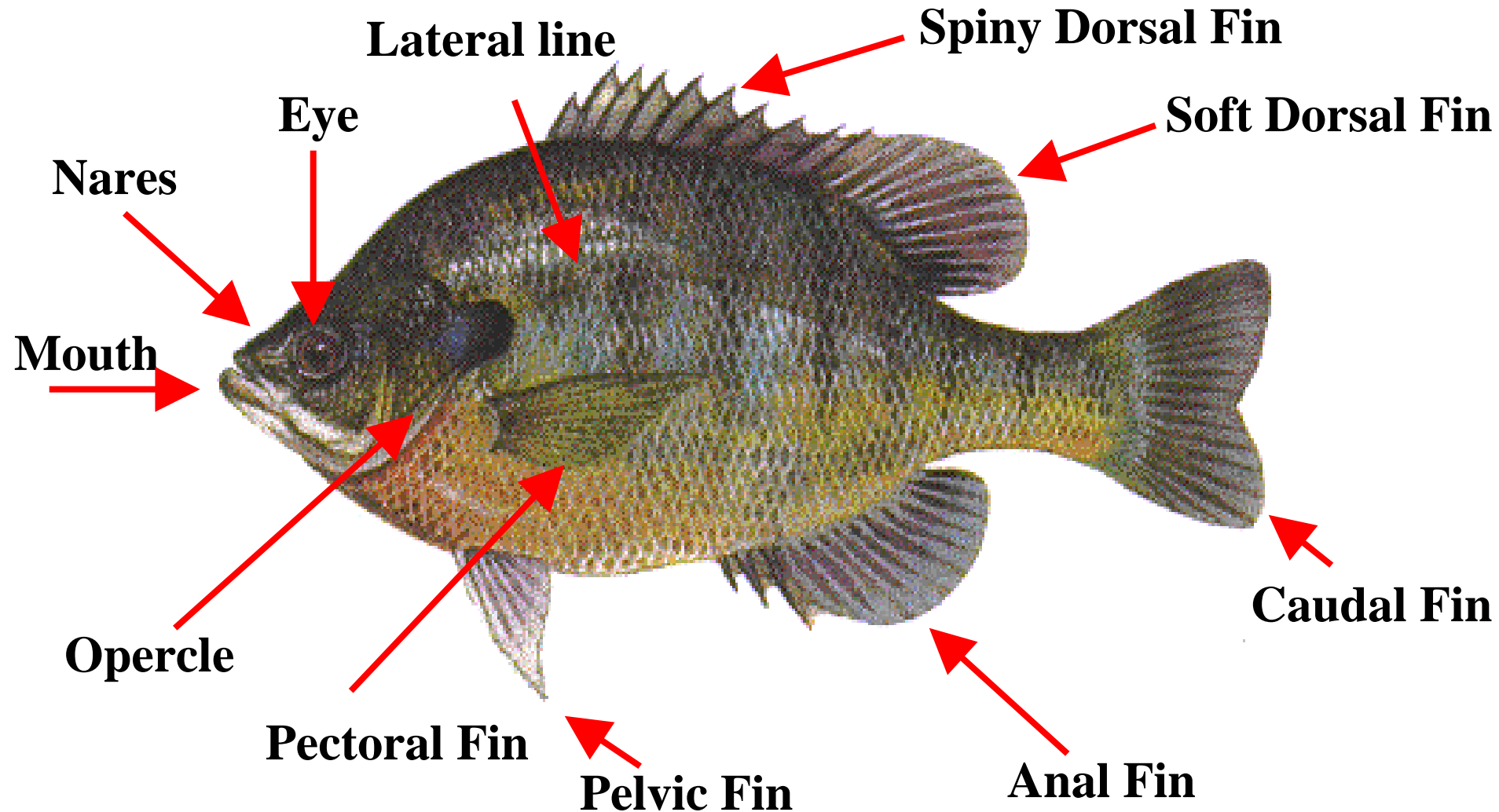
By examining a fish we can often determine where that fish might live.

Local Species

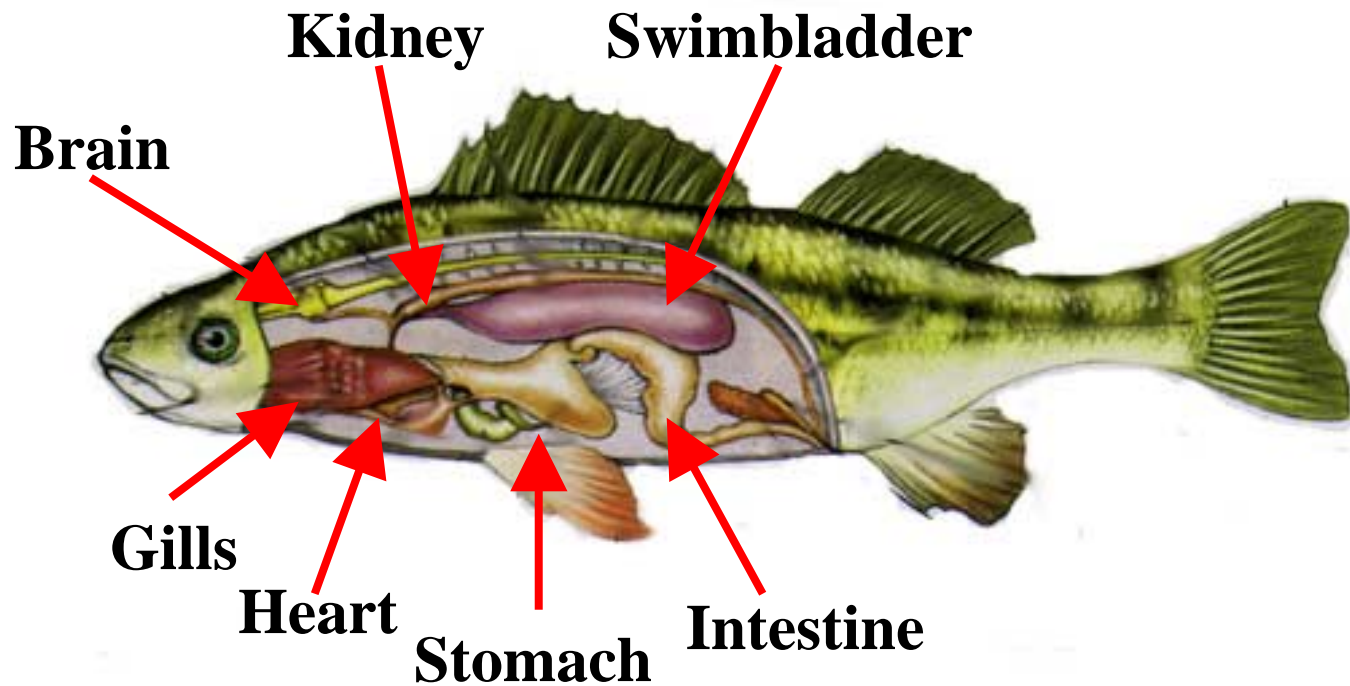
Which fish would you **NOT** expect to see in the waters of the District?



Basic Fish Anatomy



Basic Internal Anatomy



Fish Coloration

What is the purpose of color?

- Communcation: Survival of a species depends on finding a mate.
- Survival: Primary function is avoiding predation. Fish may use strategies such as concealment (i.e. a red fish in a deepwater environment or countershading by an oceanic fish) or camouflage such as a fish with vertical bars that blends in with vegetation.



Fish Movement

FINS

Dorsal Fin:

Stability

Pelvic Fin:

Variable

Caudal Fin:

Speed

Pectoral Fin:

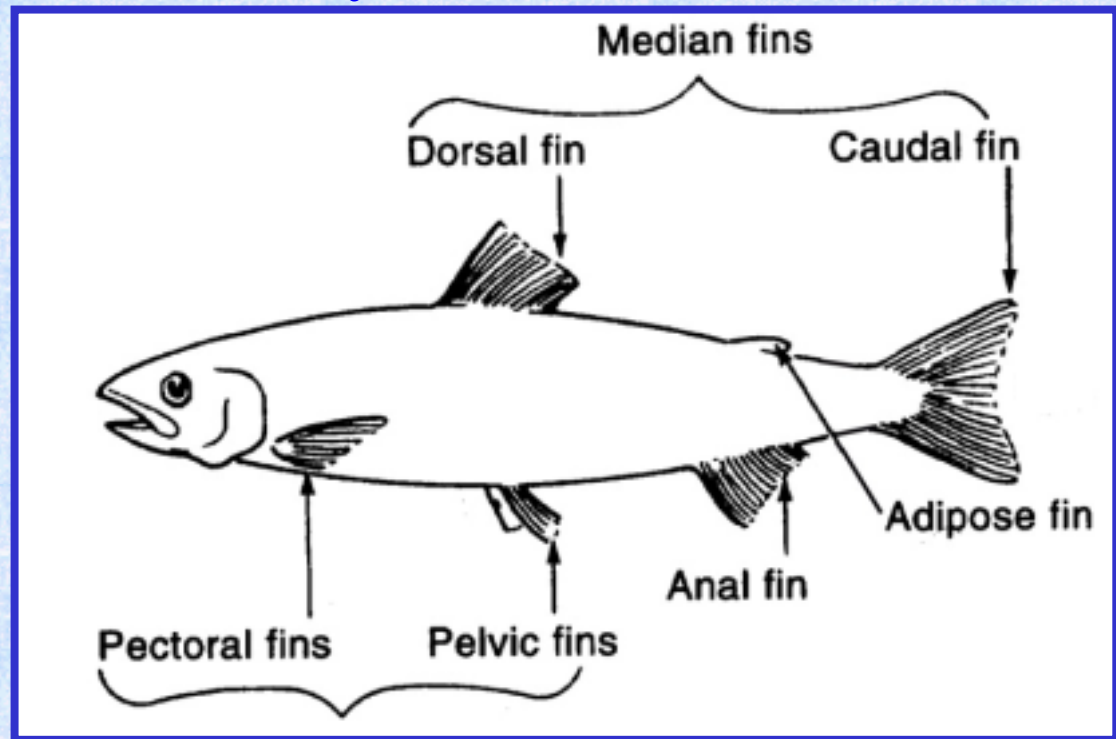
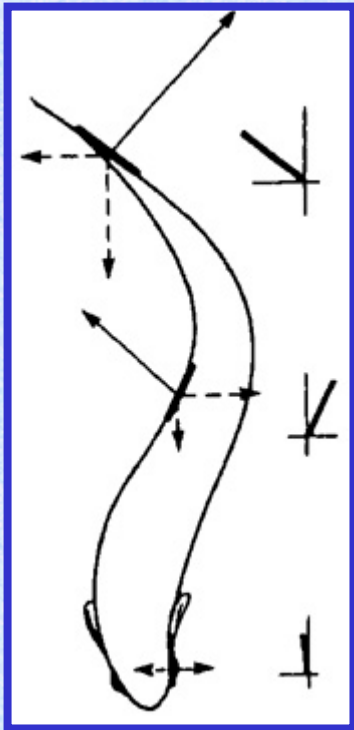
Navigation

Anal Fin:

Stability

Adipose Fin:

Larval



Undulations of body or fins provide locomotion